

REMARKS

Claims 1-10 and 16-20 remain in the application. Claims 11-15 have been canceled without prejudice.

Substance of Examiner Interview

On October 25, 2004, the Examiner called the undersigned for a restriction requirement. The undersigned elected claims 1-10 and 16-20 without traverse.

Information Disclosure Statement

The Examiner is respectfully requested to acknowledge and initial the information disclosure statement submitted by the Applicants on November 1, 2004. A copy of the information disclosure statement and returned postcard are submitted herewith for the convenience of the Examiner.

Restriction Requirement

In response to the restriction requirement of last office action, Applicants hereby elect Group I, claims 1-10 and 16-20 without traverse. Accordingly, claims 11-15 have been canceled without prejudice. Applicants reserve the right to pursue claims 11-15 in a continuation or divisional application.

Drawing Objections

FIGS. 1-4 have been amended to include the label "Prior Art" as required by the Examiner in the last office action. Replacement sheets for FIGS. 1-4 are submitted herewith.

Claim Rejections 35 U.S.C. § 103

Claims 1-10 and 16-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over what the last office action refers to as “Applicant’s Acknowledged Prior Art” (“AAPA”), FIGS. 1-4 and pages 1-5 of the Specification, in view of U.S. Patent No. 6,646,623 to Chakrabarti (“Chakrabarti”).

According to the last office action, Chakrabarti in FIG. 13 is interpreted as disclosing a modulator array wherein the optically active areas of the digital micro-mirror devices along the row are spaced apart. The last office action also suggests that spacing the micro-mirrors apart would be well within the knowledge of one skill in the art, if so desired, and that the required degree of spacing can be found through experimentation. Applicants respectfully disagree with this conclusion. Chakrabarti FIG. 13 is reproduced below for ease of discussion.

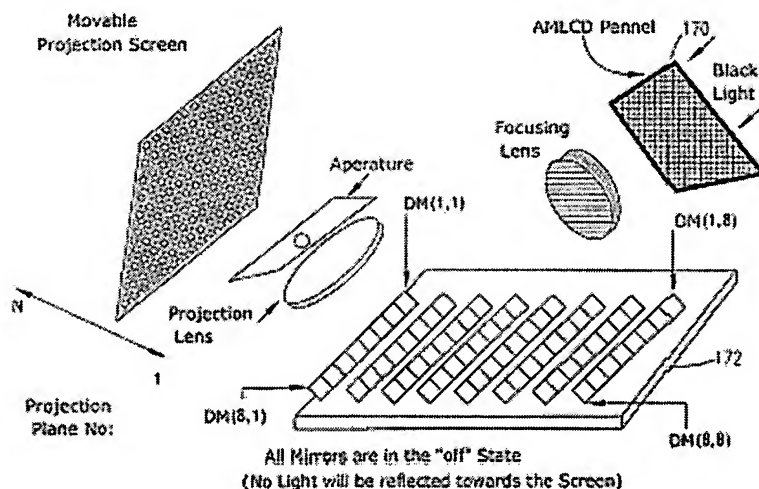


Fig. 13.

Chakrabarti relates to displaying a three-dimensional image using micro-mirrors (Chakrabarti, col. 11, lines 1-15). As such, the DM's shown in FIG. 13 are mirrors, which are **reflective** rather than **diffractive**. The micro-mirrors only reflect or not reflect incident light – they do not diffract (Chakrabarti, col. 11, lines 9-12). Claim 1 specifically recites diffractive light modulators. It is respectfully submitted that diffractive light modulators operate on totally different principles and have different structure and configuration compared to reflective light modulators. That is, one cannot simply substitute one for the other. Prior art diffractive light modulators do not have

optically active areas that are spaced apart as recited in claim 1. Therefore, it is respectfully submitted that claim 1 is patentable over the combination of AAPA and Chakrabarti.

Furthermore, Chakrabarti FIG. 13 shows a **schematic** diagram. In other words, Chakrabarti FIG. 13 is not to scale and cannot be relied upon to determine spacing. In fact, Chakrabarti does not specify the spacing of the optically active areas of the micro-mirrors. Chakrabarti merely discloses that the micro-mirrors are "laid down as an mxn array, corresponding to the mxn pixels of a display system" (Chakrabarti, col. 11, lines 5-7). For example, Chakrabarti's micro-mirrors is likely to be tightly packed as is conventionally implemented to prevent gaps between pixels. It is well established that references cited in an obviousness rejection must disclose all the limitations of the rejected claim. Here, neither AAPA nor Chakrabarti discloses or suggest spacing of optically active areas. Claim 1 is thus patentable over the combination of AAPA and Chakrabarti for at least this reason.

Applicants also strongly disagree with the notion that spacing of modulators apart is well within the knowledge of one skill in the art. One cannot simply change the spacing of modulators without having to take into account the spacing's effect on the projected image in the particular system for a particular light modulator. For example, there is no teaching as to how Chakrabarti's micro-mirrors may be configured such that their optically active areas are spaced apart and still provide a three-dimensional image without gaps between pixels.

For at least the above reasons, it is respectfully submitted that claim 1 is patentable over the combination of AAPA and Chakrabarti.

Claims 2-10 depend on claim 1. Therefore, claims 2-10 are patentable over the combination of AAPA and Chakrabarti at least for the same reasons that claim 1 is patentable, as well as because of the combination of features set forth in these claims and in claim 1. For example, in regard to claim 2, conventional ribbon light modulators are not arranged in a fashion recited in claim 1.

Claim 16 is patentable over AAPA and Chakrabarti at least for reciting: "a light modulator array comprising a plurality of diffractive light modulators arranged in columns, the diffractive light modulators within the columns having a first pitch and the columns being spaced according to a second pitch." Firstly, Chakrabarti does not disclose or suggest the use of diffractive light modulators. Secondly, the AAPA does not disclose or suggest diffractive light modulators spaced as recited in claim 16. Conventional diffractive light modulators have tightly coupled arrangements. Thirdly, Chakrabarti does not have information as to how its micro-mirrors are spaced. For at least these reasons, it is respectfully submitted that claim 16 is patentable over the AAPA and Chakrabarti combination.

Claims 17-20 depend on claim 16. Therefore, it is respectfully submitted that claims 17-20 are patentable over the AAPA and Chakrabarti combination at least for the same reasons that claim 16 is patentable, as well as because of the combination of features set forth in these claims and in claim 16.

Conclusion

For at least the above reasons, it is believed that claims 1-10 and 16-20 are in condition for allowance. The Examiner is invited to telephone the undersigned at (408)436-2112 for any questions.

If for any reason an insufficient fee has been paid, the Commissioner is hereby authorized to charge the insufficiency to Deposit Account No. 50-2427.

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Respectfully submitted,
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